REMARKS

This submission with RCE is in response to the Final Action mailed November 4, 2009.

Amendments to the claims

Claims 1 and 14 have been amended to incorporate further limitations. Support for these amendments can be found, for example, on page 11, line 26 to page 17, line 18 of the originally filed description.

Claims 7 and 9 are cancelled. Claims 8 and 10-12 have been amended to depend upon claim 1. Claim 6 is amended to reflect the change in step labels in claim 1.

Claims 15 and 16 are newly added. The support for such amendments can be found, for example, on page 13, lines 2-7 and page 19, lines 20-28.

The above amendments do not go beyond the original disclosure of the originally filed application document. No new matter is added. All amendments have been made without prejudice and the Applicants reserve the right to reintroduce any cancelled subject matter in the future.

Claim Rejections 35 USC 103

The previously pending claims 1-4, 6-7 are rejected under 35 USC § 103(a) as being unpatentable over Duvvury (US 6,917,626 B1) in view of Slater et al. (US 6,654,796B1). The previously pending claims 8-12 stand rejected for being unpatentable over Duvvury and Slater et al., in view of Dinker, and Poston in view of well known practices in the art. The previously pending claim 14 stands rejected for being et al.over Choi (US 2002/0040397A1) in view of Dinker et al. (U.S.7035858) and further in view of Slater et al..

Applicants respectfully request withdrawal of the rejections in view of the amendments to the claims.

Claim 1 has been amended to include the following features:

" *(A) composing, by a plurality of network devices, a cluster through following steps:*

(1) designating a device in a network as a cluster management device and configuring the device correspondingly by a network management device;

(2) initiating a topology acquisition process to acquire information of topological architecture of the network within a specified number of hops in the network by the cluster management device;

(3) designating candidate devices to be added to the cluster in the topological architecture according to the information of topological architecture acquired from the cluster management device, and informing the cluster management device to start the cluster member device addition process by the network management device;

(4) adding the designated candidate devices to the cluster and configures the candidate devices correspondingly by the cluster management device, so as to make the candidate devices become member devices of the cluster;

(5) after the cluster is established, managing the member devices in the cluster by the cluster management device, and forwarding management messages which are from outside of the cluster and destined to the member devices through standard Network Address Translation (NAT) process to corresponding member devices to process, and processing the management messages according to normal processing process by the member devices;

wherein, the process of adding candidate network devices to the cluster in step (4) comprises:

(A1) sending cluster addition requests to candidate network devices that can be added to the cluster by the cluster management device;

(A2) determining whether it can be added to the cluster or not according to its own condition by each candidate device; if the candidate device can not be added to the cluster, feeding back a reject response and terminating the cluster addition process; otherwise feeding back an accept response to the cluster management device;

(A3) after receiving the response from the candidate device and if the candidate device agrees to be added to the cluster, sending a configuration message containing private IP address, member number, handshaking interval, state retention time, etc. to said candidate device by the cluster management device; after receiving the message, configuring the candidate device correspondingly, and sending a complete response to the cluster management device after the configuration;"

Applicants respectfully submit that none of Duvvury, Slater, Dinker and Poston discloses the above technical features in italic of the currently amended claim 1 of the present application.

Specifically, Duvvury discloses that a commander switch is designated and equipped with an IP address, and each member switch having the capability of being configured with its own IP address. A management station is connected to the commander switch for configuration of the member devices. Once the commander switch has been enabled, it can use information known about the network topology to identify other network devices in the network that may be added to the cluster. According to one embodiment of the present application, the commander switch uses the Cisco™ Discovery Protocol ("CDP") to automatically identify candidate network devices. However, other similar products known to those of ordinary skill in the art are available from other vendors to accomplish the same task. Alternatively, discovery of candidate network devices may be performed manually by inspecting the network topology and the network devices attached to the network.

It can be seen from the above that Duvvury describes that how the commander switch identifies other network devices in the network that may be added to the cluster. However, none portion of Duvvury describe a specific process of adding candidate network devices to the cluster comprising the above technical features in italic of the amended claim 1 of the present application.

Slater discloses that each network device capable of being a cluster commander contains a cluster member data structure to store its own information. Slater does not relate to the specific process of adding candidate network devices to the cluster disclosed in the amended claim 1 of the present application either.

Dink discloses dynamic cluster membership may be handled by a topology manager utilizing a finite state automata.

Poston relates to data storage systems that provide the ability for continuous up to date backup of a computer hard disk drive.

As can be seen from the above, none of the cited references discloses the above technical features in italic of the amended claim 1, nor does the combination of the cited four references and well known practices in the art give any hint about forming such a technical solution including the above technical features.

Therefore, the amended claim 1 of the present application can not be rendered obvious based on the teaching of Duvvury and Slater et al., in view of Dinker, and Poston in view of well known practices in the art, thus is patentable under 35 U.S.C. 103(a).

The dependent claims 2-4, 6, 8, 10-12, and 15 are also non-obvious over the cited references and thus are patentable under 35 U.S.C. 103(a), based on at least their direct or indirect dependency on claim 1 or 14.

Furthermore, the applicant respectfully submits that neither Choi nor Dinker discloses or suggests the technical feature of *"the topological information processing module acquires information of topological architecture of network within a specified number of hops in the network through the topological information processing module at a candidate device side, and sends the information to the cluster member management module; the cluster member management module sends a cluster addition request to the cluster member management module in a candidate device that can be added to the cluster; the cluster*

member management module determines whether to be added to the cluster according to its conditions, and feeds back an accept or a reject response to the cluster member management module; when the cluster member management module receives an accept message from the candidate device, the DHCP-like module performs allocation of a private IP address of member network device and sends the private IP address, together with configuration information including member number, handshaking interval, and state retention time etc, to the cluster member management module in the candidate device via the cluster member management module; the cluster member management module uses the information to configure the candidate device accordingly, and feeds back a complete response to the cluster management device after configuration operation" as recited in the amended claim 14 of the present application.

Therefore, the amended claim 14 of the present application can not be rendered obvious based on the teaching of Choi in view of Dinker and further in view of Slater el al., thus is patentable under 35 U.S.C. 103(a).

Based on at least the same reasons, claim 16 dependent from claim 14 is also non-obvious over the cited references and thus is patentable under 35 U.S.C. 103(a), at least based on its dependence on an allowable claim.

In view of the foregoing, the Applicant believes the claims as amended are in allowable form. Therefore, reconsideration of the application and the grant of a patent are respectfully requested.

* * * * *

In view of the above, reconsideration and allowance of all the claims are respectfully solicited.

The Commissioner is authorized to charge any additional fees, which may be required or credit overpayment to deposit account no. 12-0415. In particular, if this RCE is not timely filed, then the Commissioner is authorized to treat this response as including a petition to extend the time period pursuant to 37 CFR 1.136 (a) requesting an extension of time of the number of months necessary to make this response timely filed and the petition fee due in connection therewith may be charged to deposit account no. 12-0415.

I hereby certify that this document is being transmitted to the Patent and Trademark Office via electronic filing.

| February 3, 2010 |
| (Date of Transmission) |

| Jessica Yo |
| (Name of Person Transmitting) |

| /Jessica Yo/ |
| (Signature) |

Respectfully submitted,

/Brian J. Cash 60546/

Brian J. Cash
Attorney for Applicants
Reg. No. 60,546
LADAS & PARRY
5670 Wilshire Blvd., Suite 2100
Los Angeles, CA 90036
(323) 934-2300 voice
(323) 934-0202 fax
bcash@la.ladas.com